

Call for Papers

“Intelligent Tutoring System Authoring Tools: Harvesting the Current Crop and Planting Seeds for the Future”

A workshop in association with the 12th International Conference on Intelligent Tutoring Systems to be held June 5th – 9th, 2014 (Workshops on 5th or 6th), Honolulu, Hawaii, USA

Length of Workshop: Full-Day

Purpose and Scope:

The purpose of this workshop is to provide the ITS community with an outlet to present and demonstrate their cutting edge research into authoring tools. As the development of authoring tools is an applied research field, it is often difficult to translate the functionality and capabilities of the tools into written publications. The current workshop aims to provide an opportunity for in-person multimedia demonstrations of authoring tools, as well as a forum for authoring tools best practices.

There are several important components to the authoring of an intelligent tutoring system. One of the first decisions which must be made is which system will be used for the final product. The authoring of the shell tutor (Gilbert, Blessing, & Kodavali, 2009; Sottolare et al., 2012; Wolfe et al., 2013) is an important, and non-trivial, step towards the construction of the tutoring system. After having decided on the system which will be used to train the learner, a model of the learner must be selected. Various approaches to learner modeling exist (Pavlik, Brawner, Olney, & Mitrovic, 2013), which each convey differing benefits at authoring time. As an example, Constraint-Based Models convey a time advantage (Mitrovic, Martin, & Suraweera, 2007), and have multiple tools available. Finally, the content of the system must be created, which may be a course within GIFT, a path of dialogue nodes within AutoTutor, or learning progressions within the Cognitive Tutor. The researchers which create intelligent tutoring systems must make several decisions with regard to authoring, which highlights this workshop as highly relevant to the community of intelligent tutoring system practitioners.

Workshop Content and Themes:

Theme: Current ITS Authoring Tools: Presenters in this theme should demonstrate/present their intelligent tutoring system authoring tools. **Each demonstration presentation is expected to be 25 minutes in length, with an additional 5 minutes for questions.** In their presentations, authors should include a brief research motivation, a demonstration of their authoring tools, and an explanation of why they chose specific designs.

Theme: Toward Compatibility in ITS Authoring Tools: Presenters in this theme should argue for or against the adoption of standards, practices, languages, and compatibilities in authoring tools in order to support reuse of content. These presenters should explain the reasoning that went into making their authoring choices, and if the audience would make a similar choice. Papers in this section should discuss the relative merits and weaknesses for the selection of an authoring tool technology. **Each presentation is expected to be 15 minutes in length, with an additional 5 minutes for questions.**

Theme: The Future of ITS Authoring Tool: Presenters and papers should discuss future factors and directions in the creation and design of authoring tools. These items include automating processes, usability factors, promoting the reuse of course material, and web-based creation/consumption. **Each presentation is expected to be 15 minutes in length, with an additional 5 minutes for questions.**

Submission Requirements:

The organizing committee invites two types of submissions: demonstrations and papers.

Authoring Tool Demonstrators (Current Tool Theme): Submitters to this theme should submit a short paper with a maximum of **6 pages** in the [Springer LNCS format](#). The paper should describe their tool, the research motivation behind it, and the considerations that went into its development. Demonstrators will be required to prepare a **25 minute presentation** on their specific authoring tools.

Paper Presenters (Toward Compatibility & Future Authoring Tools Themes): Presenters to these themes will submit a paper with a maximum of **8 pages** in [Springer LNCS Format](#). Presenters will be required to prepare a **15 minute presentation** of their paper submission.

[Submission](#) instructions:

Paper submissions should adhere to the appropriate page limit based on their type (6 pages for demonstrations; 8 pages for paper presentations), and should be in [Springer LNCS format](#). Only submissions in .doc (Word) format will be accepted. All submissions should be in English.

Please submit your completed paper to:

<https://www.easychair.org/conferences/?conf=its2014wsauthoringto>

Important Dates (from <http://its2014.its-conferences.com/important-dates>):

Event	Submission	Acceptance Notification	Final Version Due
Workshop Papers	March 20, 2014	April 20, 2014	May 5, 2014

Workshop Organizers and Chairs:

Keith Brawner, Army Research Laboratory (Co-Chair)
Anne Sinatra, Army Research Laboratory (Co-Chair)
Robert Sottolare, Army Research Laboratory (Co-Chair)

Keith.W.Brawner@us.army.mil
Anne.M.Sinatra.ctr@us.army.mil
Robert.Sottolare@us.army.mil

References

- Gilbert, S., Blessing, S. B., & Kodavali, S. (2009). The Extensible Problem-Specific Tutor (xPST): Evaluation of an API for Tutoring on Existing Interfaces. In V. Dimitrova, R. Mizoguchi, B. du Boulay & A. Graesser (Eds.), *Proceedings of the 14th International Conference on Artificial Intelligence in Education* (pp. 707-709). Amsterdam, Netherlands: IOS Press.
- Mitrovic, A., Martin, B., & Suraweera, P. (2007). Intelligent tutors for all: Constraint-based modeling methodology, systems and authoring.
- Pavlik, P. I., Brawner, K., Olney, A., & Mitrovic, A. (2013). A Review of Learner Models Used in Intelligent Tutoring Systems *Design Recommendations for Adaptive Intelligent Tutoring Systems: Learner Modeling (Volume 1)*.
- Sottolare, R. A., Brawner, K. W., Goldberg, B. S., & Holden, H. K. (2012). The Generalized Intelligent Framework for Tutoring (GIFT).
- Wolfe, C. R., Widmer, C. L., Reyna, V. F., Hu, X., Cedillos, E. M., Fisher, C. R., . . . Weil, A. M. (2013). The development and analysis of tutorial dialogues in AutoTutor Lite. *Behavior research methods*, 1-14.